BRUHAT BANGALORE MAHANAGARA PALIKE
YELAHANKA ZONE

Estimate Cost Rs. **1541544.00**

Name of Work: Modified Estimate for Installation and Construction of RO Plant in Ward No. 08 Kodigehalli.

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	ROOM FOR RO PLANT								
1	KSRB 2-2.1 : Earth work excavation for foundation of buildings, culverts water supply, sanitary line and electrical conduits either in pits or in trenches 1.5m and above in width, **in Ordinry soil** not exceeding 1.5m, in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m, after breaking of clods complete as per specifications, specification, No, KBS 2.1(a) / 2.3.5, **Page No. 5 / Item No. 2.3 / PWD SR 2015-16**	Cum							
	For Leveling Ground		1	5.00	4.00	0.20	4.00		
	Centre Line		1	16.40	1.00	1.00	16.40		
							20.40	190.00	**3876.00**
2	KSRB 4-1.3 : Providing and laying in position plain cement concrete of **mix 1:4:8 with OPC cement @ 180 kgs with 40mm** and down size graded granite metal coarse aggregates @ 0.85cum and fine aggregares @ 0.57 cum machine mixed, concrete laid in layers not, exceeding 15cms, thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1,4.2. **No. 12 / Item No. 4.3 / PWD SR 2015-16**	Cum							
	Wall Portion		1	16.40	1.00	0.15	2.46		
	Flooring		1	4.50	3.40	0.15	2.30		
	Building Surrounding		2	4.50	1.20	0.15	1.62		
			2	3.40	1.20	0.15	1.22		
							7.60	5000.00	**37995.00**
3	KSRB 5.2.3 : Providing and constructing granite / trap / basalt size stone masonry in **foundation with cement mortar 1:6**, stone hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5.1.13 **Page No. 23 / Item No. 5.6 / PWD SR 2015-16**	Cum							
	Wall Portion		1	16.40	0.75	0.60	7.38		
							7.38	4300.00	**31734.00**

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
4	KSRB 5.3-3 : Providing and constructing granite / trap / basalt size stone masonry in **basement with cement mortar 1:6**, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5-1.13 **Page No. 23 / Item No. 5.9 / PWD SR 2015-16**	Cum							
	Wall Portion		1	16.40	0.45	0.60	4.43		
							4.43	5300.00	**23468.00**
5	KSRB 2.3 : Filling available excavated earth (excluding rock) in sides of foundations upto plinth in layers not exceeding 20 cms. in depth, compacting each deposited layer by ramming after watering with lead upto 50 m. and lift upto 1.5 m. including cost of all labour complete as per specifications. Specification No. KBS 2.9 **Page No. 6 / Item No. 2.10 PWD SR 2015-16**	Cum							
			Qty Vide Item No. 35				**20.40**	150.00	**3060.00**
6	KSRB 4.2.2 : Providing and laying in position **reinforced cement concrete of design mix M20 with OPC cement @ 320 kgs, with 20mm and down size graded granite metal**, coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum with superplastisiser @ 3lts confirming to IS 9103-1999 reaffirmed-2008 machine mixed, concrete laid in layers not exceeding 15cms thick, vibrated for all works in foundation plinth and ground floor level for roof slabs, staircase, lintels, retaining walls, walls (any thickness) including attached plasters, column, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc, including cost of all materials, labour, HOM of machinery, curing, complete as per specifications. Specification No. KBS 4.1,4.6, **Page No. 13 / Item No. 4.11 / PWD SR 2015-16**	Cum							
	Plinth Beam		1	16.40	0.45	0.20	1.48		
							1.48	6600.00	**9742.00**
7	KSRB 4.9.2: Providing **T.M.T steel reinforcement for R.C.C** work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost pf materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 TMT Bars Fe 500 **Page No. 17 / Item No. 4.46.2 PWD SR 2015-16**	Qtl							
	For plinth Beam @ 100 Kg / Cum		1.00	1.48			1.48		
							1.48	6800.00	**10037.00**

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
8	KSRB 4-6.4 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for **vertical surface such as walls at any thickness**, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specifications. Specification NO KBS 4.6.2 **Page No. 15 / Item No. 4.31 / PWD SR 2015-16**	Sqm							
	Plinth Beam		2	16.40		0.20	6.56		
							6.56	300.00	**1968.00**
9	Providing and fixing Special make glazed Vitrified tiles (Granomite finis) of approved make, quality and colour of sized 6000x600x10mm thick fixed on existing flooring wit ha special roffe adhesive for flooring and skirting etc., complete including providing spears at required interval and removing stains etc., complete. **Page No. 107 / Item No. 14.43 / PWD SR 2015-16**	Sqm							
			1	4.50	3.40		15.30		
	For Steps		3	3.40	0.20		2.04		
			3	3.40	0.20		2.04		
							19.38	1100.00	**21318.00**
	ELECTRIFCATION								
10	Supplying and wiring adopting loop system in existing PVC Conduit / casing capping using 1100V grade, COPPER conductor flexible multistrand FRLS PVC insulated, 2 X1.5Sq.mm Cable confirming to the GTP, with a 6Amps flush type SP control switch shall be fixed on the existing plastic sheet / gang box, the other end of the wires shall be terminated with sufficient loose length in a wood/PVC round block. complete for each outlet. GROUP A b) Medium point above 3Mtr upto 6Mtr from tapping point to out let via switch **(Page No. 05, Item No.2.1 KPWD SR 2014-15**	Point							
			2				**2**	250.00	**500.00**
11	c) Long point above 6Mtr upto 10Mtr from tapping point to out let via switch	Point	2				**2**	350.00	**700.00**
12	Supplying and flush mounting teak wooden box without front plank, made of not less than 12mm thick wood, after due groove cutting, Finishing with necessary cement plastering complete (1.6.5) 4"x4"x3" (101x101x76mm) **(Page No. 03, Item No. 1.6) KPWD SR 2014-15**	Each							
			12				**12**	60.00	**720.00**
13	(1.6.1) 12"x12"x3" (300x300x76mm)	Each	6				**6**	110.00	**660.00**
14	(1.6.3)10"x7"x3" (254x178x76mm)	Each	6				**6**	80.00	**480.00**

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
15	Supplying 4mm thick plastic sheet with necessary nitches for fixing switches, regulators etc., and fixing on existing wooden or metal box using N.F. screws. **(Page No. 17, Item No. 3.9) KPWD SR 2014-15**	SqCM							
							6666.66	0.20	**1333.00**
16	Extra for Groove cutting in brick wall/CC floor to the suitable depth for concealing of Conduit/GI pipe and plastering, finishing upto wall surface complete. upto 50mm conduit in brick wall **(Page No. 03, Item No.1.7.1) KPWD SR 2014-15**	Mtr							
			1	10.00			**10**	20.00	**200.00**
17	Supplying heavy gauge PVC Conduit Pipe 19/20 mm dia 2 mm thick with suitable size bends, metal junction boxes adhesive paste etc., by groove cutting in the wall and fixing by bracing U or J hooks and cement plastering up to the wall surface and run with 18 SWG GI fish wire run throughout the conduit wherever necessary. **(Page No. 02, Item No. 1.3.1) KPWD SR 2014-15**	Mtr							
			1	10.00			**10**	50.00	**500.00**
18	Supplying and fixing PBBC/Bakelite straight or slant batten holder and wiring with 60w/230 volts lamps. **(Page No. 20, Item No. 4.2) KPWD SR 2014-15**	Each							
			2				**2**	80.00	**160.00**
19	Supplying patti type fluorescent tube light fitting of 2' - suitable for 14 watts fluorescent tube fitting, made out of M.S. Sheet and stove enameled with HF Electronic Ballast , locking type brass contact holders mounted on double fold type sheet base fully wired for use on 230 volts AC . Supply including T5 lamp. **(Page No. 20, Item No. 4.5) KPWD SR 2014-15**	Each							
			2				**2**	500.00	**1000.00**
20	Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand Copper with low conductor resistance single core wire in open or concealed system of wiring with specified IS-694:1990 & confirming to GTP of GROUP -A 1.5 sqmm **(Page No. 06, Item No. 2.5.2) KPWD SR 2014-15**	Mtr							
			1	5.00			**5**	20.00	**100.00**
21	Supplying and fixing cast Aluminum round or oblong type bulk head fitting with GI wire guard, glass cover with 60/100 watts 230V GLS lamp. **(Page No. 20, Item No. 4.3) KPWD SR 2014-15**	Each							
			4				**4**	800.00	**3200.00**

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
22	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 122 mm dia **(Page No. 55, Item No. 7.1) KPWD SR 2014-15**	No							
			1				**1**	2800.00	**2800.00**
	EIRL								
23	Providing and Construction of pup panel cabin MS material vetical 50 x 100 mm thick tube, rafter 50 x 100 mm thick rectangle tube 50 x 50 mm thick tuve purlines, roof panel of 30 mm sandwitch puf panel density : 40 kg and wall panel of 30 mm sandwitch puf. pannel density : 40 kgs (polyurethane foam) with noth side G I Colour coated sheet ancillaries like C-channels, angles, sealene etc, door of size 1.8 x 2.0 m an alluminium powder coated window of size 1.00 x 2.00 m 1 No of structural glazing (fixed and sliding One side slope as per elclosed drawing cabin of size etc (Approved Quoated Rate)	Each							
			1				**1**	393450.00	**393450.00**
	Approved Rate	375000.00							
	Tender premium @ +4.92%	18450.00							
	Total	**393450.00**							
24	**10000 LPD R.O. Plant**								
	RAW WATER PUMP:								
	Quantity : 1No.								
	Type: Centrifugal Mono Block								
	MOC & Make : UKL								
	Motor Rating : 0.75 HP								
	PRESSURE SAND FILTER:								
	Quantity : 1No.								
	Capacity : 1000 LPH								
	MOC & Make of Housing : UKL								
	MOC & Make of Cartridge : UKL								
	Capcity : 100 LPH								
	MOC & Make of Vessel : UKL								
	Diameter : 40 mm								
	Type of Valve : Single Multiport								
	media : Support bed + Sand								
	MICRON CARTRIDGE FILTER :								
	Quantity : 1 Set.								
	Filter Rating : 5 Microns								
	Size : 20 " Long								
	ANTISCALANT DOSING PUMPS:								
	Quanity : 1 Set								
	Type : Electro - magnetic								
	Capacity : 1.5 LPH @ 4 Bar								
	HIGH PRESSURE PUMP:								
	Quantity : 1 No								
	Capacity : 1700 LPH								

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Type of Pump : Vertical Multistage Centrigugal Pump								
	.OC : SS 304								
	lotor Rating : 2 HP, 3 Phase								
	Maximum Pressure : 12 Kg/ cm2								
	Make : UKL								
	RESERVE OSMOSIS SYSTEM :								
	Quantity : 1 No								
	Capacity : 1000 LPH								
	Module Type								
	Membrane Specifications {Polyamde}								
	Make of Membrane : UKL								
	UV STERILISER								
	Max. Treatment Flow : 1 m3/hr								
F	No. of Lamps : 1 No								
	Wattage : 39 W								
	Efficiency : 99.99%								
	Material of Construction : SS 304								
	PRODUCT WATER QUALITY:								
	Appearance : Crystal Clear								
	Abide by the ISO Standards								
	S S Tank : 304 Grade with 16 guage 2000 liters Capacity								
	304 Grade 10 Gauage SS Pipe {with stream valve} 25 Ft								
	COIN BOOTH DISPENSING UNIT								
	for 5 Liters & 20 Ltrs Separately								
	Raw Water Stoage Tank : Dunction - for Storage of Raw Water								
	Type / MOC : Two / Three Layered PE tanks White / Transparent in color made from virgin material of food grade Quality suitabke fir the purpose of providing								
	Storage Drinking / Portable Water : 5000 Liters Capacity	Nos							
			1				**1**	992543.20	**992543.00**
	Approved Rate	946000.00							
	Tender premium @ +4.92%	46543.20							
	Total	**992543.20**							
								Total	**1541544.00**
Rupees Fifteen Lakh(s) Forty One Thousand Five Hundred Forty Four Only									

CERTIFICATE:

1 The work spot has been inspected and the work is found necessary.

2 This estimate is prepared as per C.S.R. of PWD 2015-16, PWD Elecrical 2014-15, PRED 2012-13 & SE-RDED approved Rate +/- Tender Premium

3 The provisions were made in this estimate are necessary and adequate.

4 This works come under B.B.M.P. limits.

Assistant Engineer
Ward No. 08

Assistant Executive Engineer
Bruhat Bangalore Mahanagara Palike
Kodigehalli Sub Division

Executive Engineer
Bruhat Bangalore Mahanagara Palike
Byatarayanapura Division

Chief Engineer
Yelahanka Zone
Bruhath Bangalore Mahanagara
Bangalore 92